

Amendments to the claims:

The following listing of the claims replaces all previous listings and versions of the claims in the application.

Listing of the Claims:

Claims 1-8: (canceled)

9. (new) An offshore oil well riser system extending from a floating vessel to well equipment located on the sea floor, the riser system comprising:

an elongated, substantially vertical pipe section supported by the floating vessel and extending downward towards the sea floor;

a substantially horizontal pipe section connected to the sub-sea well equipment; and

an angled section of pipe connecting the vertical pipe section to the horizontal pipe section such that the vertical and horizontal pipe sections resiliently flex in a direction generally perpendicular to their respective long axes in response to motion of the floating vessel;

wherein at least one of the vertical and the horizontal pipe sections includes a flexing portion that resiliently flexes in directions both generally perpendicular and parallel to its long axis in response to motion of the floating vessel, the flexing portion comprising a plurality of recurvate sections connected end-to-end in a substantially sinusoidal configuration having a wavelength and amplitude such that the curvature of the flexing portion allows the passage of tools through the flexing portion.

10. (new) The riser system of claim 9 wherein the wavelength is between 20 and 40 feet, and the amplitude is between 2 and 5 feet.

11. (new) The riser system of claim 9, wherein the flexing portion is included in both of the vertical and horizontal pipe sections.

12. (new) An offshore oil well riser system extending from a floating vessel to well equipment located on the sea floor, the riser system comprising:

an elongated, substantially vertical pipe section supported by the floating vessel and extending downward towards the sea floor;

a substantially horizontal pipe section connected to the sub-sea well equipment; and
an angled section of pipe connecting the vertical pipe section to the horizontal pipe section such that the vertical and horizontal pipe sections resiliently flex in a direction generally perpendicular to their respective long axes in response to motion of the floating vessel;

wherein at least one of the vertical and the horizontal pipe sections includes a flexing portion that resiliently flexes in directions both generally perpendicular and parallel to its long axis in response to motion of the floating vessel, the flexing portion comprising a plurality of recurvate sections connected end-to-end in a substantially helical configuration having a pitch and a radius such that the curvature of the flexing portion allows the passage of tools through the flexing portion.

13. (new) The riser system of claim 12 wherein the pitch is between 20 and 40 feet, and the radius is between 2 and 5 feet.

14. (new) The riser system of claim 12, wherein the flexing portion is included in both of the vertical and horizontal pipe sections.